Patent Claims

We Claim:

1. A compound of formula (I):

or a pharmaceutically acceptable salt thereof,

wherein

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R¹ denotes 3-hydroxypropyl, 1,3-dihydroxyprop-2-yl or C₃-C₆-cycloalkylmethyl,

 $R^2 \qquad \qquad denotes \ hydrogen, C_1\text{-}C_6\text{-}alkyl, \ \omega\text{-}hydroxy\text{-}C_2\text{-}C_4\text{-}alkyl, \ 1,3\text{-}dihydroxyprop-2-yl \ or \ }$

C₃-C₆-cycloalkylmethyl,

Ar denotes unsubstituted phenyl or phenyl which is 1- to 5-substituted by halogen, hydroxy, C₁-C₄-alkyl, C₁-C₄-alkoxy, C₁-C₄-fluoroalkyl, C₁-C₄-

fluoroalkoxy or -OCH2O-;

 $R^3 \qquad \qquad \text{denotes phenyl-$C_1-C_4-alkyl$, wherein the phenyl group may be substituted by} \\ 1 \text{ to 3 substituents, wherein the substituents independently of one another are} \\ \text{selected from halogen, hydroxy, $C_1-C_4-alkyl$, $C_1-C_4-alkyy$,} \\$

C1-C4-fluoroalkyl, and C1-C4-fluoroalkoxy;

and

R⁴ denotes hydrogen, C₁-C₄-alkyl, C₃-C₈-cycloalkyl, CH₂COOH, -CH₂C(O)NH₂,

OH or phenyl-C₁-C₄-alkyl.

- A compound according to claim 1, wherein R⁴ is C₁-C₄-alkyl.
- A compound according to claim 1, wherein Ar is unsubstituted phenyl or 2,3methylenedioxyphenyl.

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- A compound according to claim 2, wherein Ar is unsubstituted phenyl or 2,3methylenedioxyphenyl.
- 5. A compound according to claim 1, wherein R³ denotes 2-phenylethyl, where the phenyl group may be substituted by 1 to 3 substituents, wherein the substituents independently of one another are each selected from among halogen, hydroxy, methyl, methoxy, trifluoromethyl or trifluoromethoxy.
 - 6. A compound according to claim 2, wherein R³ denotes 2-phenylethyl, where the phenyl group may be substituted by 1 to 3 substituents, wherein the substituents independently of one another are each selected from among halogen, hydroxy, methyl, methoxy, trifluoromethyl or trifluoromethoxy.
 - 7. A compound according to claim 3, wherein R³ denotes 2-phenylethyl, where the phenyl group may be substituted by 1 to 3 substituents, wherein the substituents independently of one another are each selected from among halogen, hydroxy, methyl, methoxy, trifluoromethyl or trifluoromethoxy.
- 8. A compound according to claim 4, wherein R³ denotes 2-phenylethyl, where the phenyl group may be substituted by 1 to 3 substituents, wherein the substituents independently of one another are each selected from among halogen, hydroxy, methyl, methoxy, trifluoromethyl or trifluoromethoxy.
 - 9. A compound according to claim 1, wherein \mathbb{R}^3 is 2-(3,5-bistrifluoromethylphenyl)-ethyl.
 - $10. \ \ A \ compound \ according \ to \ claim \ 2, wherein \ R^3 \ is \ 2-(3,5-bistrifluoromethylphenyl)-ethyl.$
- 30 11. A compound according to claim 3, wherein R³ is 2-(3,5-bistrifluoromethylphenyl)-ethyl.

- 12. A compound according to claim 4, wherein R³ is 2-(3,5-bistrifluoromethylphenyl)-ethyl.
- 5 13. A compound according to claim 1, wherein the group -NR³R⁴ is

10 14. A compound according to claim 2, wherein the group -NR³R⁴ is

15 15. A compound according to claim 3, wherein the group -NR³R⁴ is

16. A compound according to claim 4, wherein the group -NR³R⁴ is

- 5 17. A compound according to claim 1, wherein R¹ denotes a cyclopropymethyl group, and
 - R² denotes a hydrogen atom, a C₁-C₃-alkyl group or a 3-hydroxypropyl group.
- 10 18. A compound according to claim 2, wherein R¹ denotes a cyclopropymethyl group, and R² denotes a hydrogen atom, a C₁-C₃-alkyl group or a 3-hydroxypropyl group.
- $\label{eq:continuous} 15 \qquad 19. \ A \ compound \ according \ to \ claim \ 3, \ wherein$ $R^1 \ denotes \ a \ cyclopropymethyl \ group, \ and$ $R^2 \ denotes \ a \ hydrogen \ atom, \ a \ C_1 C_3 alkyl \ group \ or \ a \ 3 hydroxypropyl \ group.$
- 20. A compound according to claim 4, wherein R¹ denotes a cyclopropymethyl group, and R² denotes a hydrogen atom, a C₁-C₃-alkyl group or a 3-hydroxypropyl group.
 - 21. A compound according to claim 1, wherein
- 25 R¹ denotes a 3-hydroxypropyl or 1,3-dihydroxyprop-2-yl group, and R² denotes a hydrogen atom, a C₁-C₃-alkyl group or a 2-hydroxyethyl group.

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22. A compound according to claim 2, wherein

23. A compound according to claim 3, wherein

R1 denotes a 3-hydroxypropyl or 1,3-dihydroxyprop-2-yl group, and

 R^2 denotes a hydrogen atom, a $C_1\hbox{-} C_3\hbox{-alkyl}$ group or a 2-hydroxyethyl group.

R1 denotes a 3-hydroxypropyl or 1,3-dihydroxyprop-2-yl group, and

R² denotes a hydrogen atom, a C₁-C₃-alkyl group or a 2-hydroxyethyl group.

24. A compound according to claim 4, wherein

R1 denotes a 3-hydroxypropyl or 1,3-dihydroxyprop-2-yl group, and

R² denotes a hydrogen atom, a C₁-C₃-alkyl group or a 2-hydroxyethyl group.

25. A compound according to claim 1, selected from the following compounds:

HO CH₃ CF₃

$$CH_3$$

$$CF_3$$

$$CH_3$$

$$CF_3$$

$$CH_3$$

$$CF_3$$

$$CH_3$$

$$CF_3$$

$$CH_3$$

$$CF_3$$

$$CH_3$$

$$CF_3$$

$$CH_3$$

and

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5 26. A process for preparing a compound of formula I according to claim 1, said process comprising reacting an amide of formula II

$$X \xrightarrow{N} R^3$$
 R^4
 (II)

wherein Ar, R^3 and R^4 are as defined in claim 1 and $\, X$ denotes a suitable leaving group,

with a piperidine of formula III

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$$R^{1}$$
N— N -H (III)

wherein R¹ and R² are as defined in claim 1, in an inert solvent in the presence of a base.

27. A pharmaceutical composition comprising a compound according to claim I and one or more pharmaceutically acceptable carriers and excipients.

- 28. A method of treating a neurokinin-mediated illness comprising administering to a host in need of such treatment a therapeutically effective amount of a compound according to claim 1.
- 29. A method according to claim 28, wherein the illness treated is selected from inflammatory and allergic conditions of the airways, eyes, skin, the gastro-intestinal tract, joints, bones and bladder; and central nervous system diseases.
- 30. A method according to claim 28, wherein the illness treated is selected from the following:

asthma, chronic bronchitis, hyperreactive airways, emphysema, rhinitis, COPD, pulmonary hypertension, cystic fibrosis, coughs;

conjunctivitis, iritis;

dermatitis in contact eczema, neurodermatitis, pruritus, urticaria, psoriasis, sunburn, burns, insect bites, rosacea, itching, sensitive or hypersensitive skin;

gastric and duodenal ulcers, ulcerative colitis, Crohn's disease, inflammatory bowel disease, irritable colon, Hirschsprung's disease, motility problems;

rheumatoid arthritis, reactive arthritis, arthrosis, osteoporosis and Reiter's syndrome;

irritable bladder, incontinence, urinary urgency, urethritis, colic and cystitis; restless leg syndrome;

dementia, Alzheimer's disease, schizophrenia, psychoses, anxiety states, alcohol or drug dependency, sexual dysfunctions, eating disorders, depression, headaches, epilepsy,

5 Parkinson's disease, stroke;

Herpes zoster, postherpetic pain, tumors, collagenoses, a dysfunction of the deferent urinary tracts, haemorrhoids, nausea and vomiting, and pain.

 A method according to claim 29, wherein the illness is selected from: COPD, anxiety states and depression.